

Form: PTO/SB/17 (Modified)

**REPLY/AMENDMENT
FEE TRANSMITTAL**

Attorney Docket No.	8AC4-D2
Application Number	09/501,622
Filing Date	2/9/00
First Named Inventor	Mills
Group Art Unit	1754
AMOUNT ENCLOSED	\$ 760
Examiner Name	Langel

FEE CALCULATION (fees effective 10/01/97)

CLAIMS AS AMENDED	Claims Remaining After Amendment	Highest Number Previously Paid For	Number Extra	Rate	Calculations
TOTAL CLAIMS	265	265	0 ⁽³⁾	X \$18.00 =	
INDEPENDENT CLAIMS	2	3	0	X \$78.00 =	
Since an Official Action set an <u>original</u> due date of <u>12/24/01</u> , petition is hereby made for an extension to cover the date this reply is filed for which the requisite fee is enclosed (1 month (\$110); 2 months (\$400); 3 months (\$950); 4 months (\$1,510); 5 months (\$2,060)): 3 Months					1020
Notice of Appeal					500
Total of above Calculations =					\$1520
Reduction by 50% for filing by small entity (37 CFR 1.9, 1.27 & 1.28)					-760
TOTAL FEES DUE =					\$760
<small>(1) If entry (1) is less than entry (2), entry (3) is "0". (2) If entry (2) is less than 20, change entry (2) to "20". (4) If entry (4) is less than entry (5), entry (6) is "0". (5) If entry (5) is less than 3, change entry (5) to "3".</small>					

METHOD OF PAYMENT

- ☒ Check enclosed as payment.
- ☐ Charge "TOTAL FEES DUE" to the Deposit Account No., below.

AUTHORIZATION

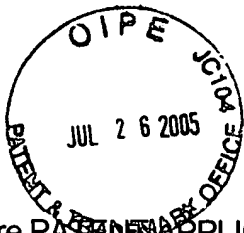
- ☒ If the above-noted "AMOUNT ENCLOSED" is not correct, the Commissioner is hereby authorized to credit any overpayment or charge any additional fees under 37 CFR 1.16 or 1.17 necessary to maintain pendency of the present application to:

Deposit Account No.: 50-0687

OrderNo.: (Client/Matter) 62-226

SUBMITTED BY: Manelli Denison & Selter, PLLC

Typed Name	Jeffrey S. Melcher	Reg. No.	35,950
Signature		Date	July 26, 2006



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Re: Appeal to the Board of Patent Appeals and Interferences

In re PATENT APPLICATION of
Inventor(s): Mills

Group Art Unit: 1745

Appln. No.: 09/501,622

Examiner: Kalafut for Secret Committee

Filing Date: 02/09/2000

Title: DOPED SEMICONDUCTOR AND METHOD OF MAKING THE DOPED SEMICONDUCTOR

Sir:

- 1 ☒ **NOTICE OF APPEAL:** Applicant hereby appeals to the Board of Patent Appeals and Interferences from the decision (not Advisory Action) dated of the Examiner twice/finally rejecting claims
- 2 ☐ **BRIEF** on appeal in this application attached in triplicate.
- 3 ☐ An **ORAL HEARING** is respectfully requested under Rule 194 (due two months after Examiner's Answer – unextendable).
- 4 ☐ Reply Brief is attached in triplicate (due two months after Examiner's Answer – unextendable).
- 5 ☒ "Small entity" ☐ herewith. ☒ previously.

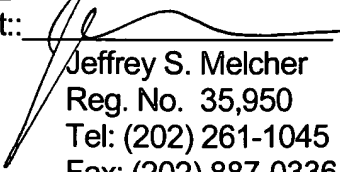
6 FEE CALCULATION:		Large/Small Entity	
If box 1 above is X'd, see box 12 below <u>first</u> and decide: enter		\$	\$500
If box 2 above is X'd, see box 12 below <u>first</u> and decide: enter		\$	\$
If box 3 above is X'd, see box 12 below <u>first</u> and decide: enter		\$	\$
If box 4 above is X'd, enter nothing		- 0 - (no fee)	
7. Original due date: Petition Requested and Fees Paid In Accompanying Fee Transmittal			
8. Petition is hereby made to extend the original due date to cover (1 months) the date this response is filed for which the requisite fee is attached (2 months) (3 months) (4 months) (5 months)			
9. Enter any previous extension fee paid [] previously since above original due date (item 7); [X] with concurrently filed amendment		-	
10. Subtract line 9 from line 8 and enter: Total Extension Fee			0
11. TOTAL FEE ATTACHED =			\$Paid

12. ☐ *Fee **NOT** required if/since paid in prior appeal in which the Board of Patent Appeals and Interferences did not render a decision on the merits.

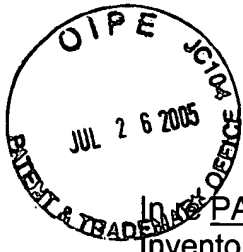
CHARGE STATEMENT: The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficient fee only) now or hereafter relative to this application and the resulting Official document under Rule 20, or credit any overpayment, to our Account/Order Nos. 50-0687/62226 for which purpose a duplicate copy of this sheet is attached. This **CHARGE STATEMENT** does not authorize charge of the issue fee until/unless an issue fee transmittal form is filed.

Manelli Denison & Selter, PLLC

Customer No.: 20736

Att.: 
Jeffrey S. Melcher
Reg. No. 35,950
Tel: (202) 261-1045
Fax: (202) 887-0336

July 26, 2005



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Mills
PATENT APPLICATION of

Group Art Unit: 1745

Appln. Ser. No.: 09/501,622

Secret Committee: Kalafut *for the*
Secret Committee

Filing Date: 02/09/2000

Title: DOPED SEMICONDUCTOR AND METHOD OF MAKING THE DOPED
SEMICONDUCTOR

July 26, 2005

NEW INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Attached are PTO/SB/O8B forms listing the enclosed documents. Copies of the enclosed documents are attached to the presently filed Information Disclosure Statement and/or to the Attachments to the Response filed herewith.

Applicant advises the Secret Committee that took over examination of his pending applications relating to his lower-energy hydrogen technology that Applicant has made a concerted effort to review those applications for documents cited therein and to make those documents of record in each case. Because, however, Applicant's lower-energy hydrogen applications were consolidated under a single Examiner, Bernard Eng-Kie Souw, Applicant believes that the Committee should already be familiar with the totality of these documents. Nonetheless, for purposes of completeness and ensuring that all cited documents have been brought to the PTO's attention, Applicant provides the following list of applications relating to his lower-energy hydrogen technology:

U.S. Ser. No.	Filing Date
10/513,026	11/01/04
10/494,571	5/6/04
10/469,913	9/5/2003
10/331,725	12/31/02
10/319,460	11/27/02
09/669,877	9/27/00
09/813,792	3/22/01
09/513,768	2/25/00
09/678,730	10/4/00
09/362,693	7/29/99
09/181,180	10/28/98
09/225,687	1/6/99
09/110,717	7/7/98
09/110,694	7/7/98
09/501,622	2/9/00
09/501,621	2/9/00
09/111,003	7/7/98
09/111,160	7/7/98
09/110,678	7/7/98
09/009,455	1/20/98
09/009,294	1/20/98
09/008,947	1/20/98
09/009,837	1/20/98
08/467,051	6/6/95
08/467,911	6/6/95
08/416,040	4/3/95
08/107,357	8/16/93
08/075,102	6/11/93
07/825,845	1/28/92
07/626,496	12/12/90
07/345,628	4/28/89
07/341,733	4/21/89

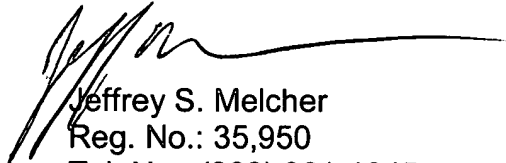
If necessary, please accept this Information Disclosure Statement under Rule 97(c) and charge the requisite Rule 17(p) fee to our Deposit Account No. 50-0687 under Order No. **62-226** for which purposes this paper is submitted in duplicate.

This Information Disclosure Statement is intended to fully comply with the rules, but should the Examiner find any part of its required content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicant to fully comply.

Consideration of the foregoing remarks and enclosures, including return of a copy of the attached PTO/SB/08A and B forms with the Examiner's initials in the left column per MPEP § 609 and an early action on the merits of this application, are earnestly solicited.

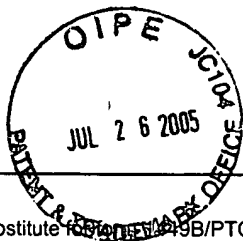
Respectfully submitted,
Manelli Denison & Selter PLLC

By



Jeffrey S. Melcher
Reg. No.: 35,950
Tel. No.: (202) 261-1045
Fax. No.: (202) 887-0336

Customer No. 20736



PTO/SB/08B (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	09/501,622	
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			First Named Inventor	Mills	
			Group Art Unit	1745	
			Examiner Name	Kalafut	
Sheet	1	12	Attorney Docket Number		8ac4-D2

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	58	R. L. Mills, "Classical Quantum Mechanics," Physics Essays, Vol. 16, No. 4, December, (2003), pp. 433-498. (Web Publication Date: May 23, 2002.)	
	60	R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Synthesis of HDLC Films from Solid Carbon," Journal of Materials Science, in press. (Web Publication Date: May 3, 2002.)	
	77	J. Phillips, R. L. Mills, X. Chen, "Water Bath Calorimetric Study of Excess Heat in 'Resonance Transfer' Plasmas," J. Appl. Phys., Vol. 96, No. 6, (2004) 3095-3102. (Web Publication Date: June 16, 2003.)	
	80	R. L. Mills, "The Fallacy of Feynman's Argument on the Stability of the Hydrogen Atom According to Quantum Mechanics," Annales de la Fondation Louis de Broglie, submitted. (Web Publication Date: Jan. 27, 2003.)	
	81	R. Mills, P. Ray, B. Dhandapani, W. Good, P. Jansson, M. Nansteel, J. He, A. Voigt, "Spectroscopic and NMR Identification of Novel Hydride Ions in Fractional Quantum Energy States Formed by an Exothermic Reaction of Atomic Hydrogen with Certain Catalysts," European Physical Journal: Applied Physics, 28, (2004), 83-104. (Web Publication Date: Feb. 21, 2003.)	
	88	R. Mills, J. Sankar, A. Voigt, J. He, P. Ray, B. Dhandapani, "Role of Atomic Hydrogen Density and Energy in Low Power CVD Synthesis of Diamond Films," Thin Solid Films, 478, (2005) 77-90. (Web Publication Date: Dec. 22, 2003.)	
	94	R. L. Mills, "The Nature of the Chemical Bond Revisited and an Alternative Maxwellian Approach," Physics Essays, in press. (Web Publication Date: Aug. 6, 2003.)	
	96	J J. Phillips, C.K. Chen, R. L. Mills, "Evidence of the Production of Hot Hydrogen Atoms in RF Plasmas by Catalytic Reactions Between Hydrogen and Oxygen Species," Spectrochimica Acta Part B: Atomic Spectroscopy, submitted. (Web Publication Date: Sept. 12, 2003.)	
	97	R. L. Mills, P. Ray, B. Dhandapani, "Evidence of an Energy Transfer Reaction Between Atomic Hydrogen and Argon II or Helium II as the Source of Excessively Hot H Atoms in RF Plasmas," Journal of Plasma Physics, in press. (Web Publication Date: Sept. 26, 2003.)	
	98	R. L. Mills, Y. Lu, J. He, M. Nansteel, P. Ray, X. Chen, A. Voigt, B. Dhandapani, "Spectral Identification of New States of Hydrogen," New Journal of Chemistry, submitted. (Web Publication Date: Nov. 18, 2003.)	

Examiner Signature		Date Considered	
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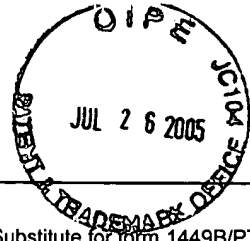
PTO/SB/08B (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known		
		Application Number	09/501,622	
		Filing Date	02/09/2000	
		First Named Inventor	Mills	
		Group Art Unit	1745	
		Examiner Name	Kalafut	
Sheet	2	12	Attorney Docket Number	8ac4-D2

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	100	R. Mills, B. Dhandapani, J. He, "Highly Stable Amorphous Silicon Hydride from a Helium Plasma Reaction," Materials Chemistry and Physics, submitted. (<i>Web Publication Date: Nov. 17, 2003.</i>)	
	101	R. L. Mills, Y. Lu, M. Nansteel, J. He, A. Voigt, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Fuel Chemistry, Session: Chemistry of Solid, Liquid, and Gaseous Fuels, 227th American Chemical Society National Meeting, March 28-April 1, 2004, Anaheim, CA.	
	102	R. L. Mills, "Exact Classical Quantum Mechanical Solutions for One- through Twenty-Electron Atoms," Phys. Essays, submitted. (<i>Web Publication Date: April 22, 2004.</i>)	
	103	R. L. Mills, Dhandapani, W. Good, J. He, "New States of Hydrogen Isolated from K ₂ CO ₃ Electrolysis Gases," Electrochim. Acta, submitted. (<i>Web Publication Date: April 28, 2004.</i>)	
	104	R. L. Mills, Y. Lu, M. Nansteel, J. He, A. Voigt, W. Good, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Fuel Chemistry, Session: Advances in Hydrogen Energy, 228th American Chemical Society National Meeting, August 22–26, 2004, Philadelphia, PA.	
	113	R. Mills, "Physical Solutions of the Nature of the Atom, Photon, and Their Interactions to Form Excited and Predicted Hydrino States", New Journal of Physics, submitted.	
	114	R. Mills, K. Akhtar, B. Dhandapani, "Tests of Features of Field-Acceleration Models for the Extraordinary Selective H Balmer α Broadening in Certain Hydrogen Mixed Plasmas," Journal of Applied Physics, submitted. (web publication June 24, 2005, www.blacklightpower.com).	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



PTO/SB/08B (Modified)

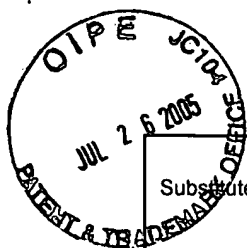
Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	09/501,622	
			Filing Date	02/09/2000	
			First Named Inventor	Mills	
			Group Art Unit	1745	
			Examiner Name	Kalafut	
Sheet	3		12	Attorney Docket Number	8ac4-D2

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Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	105	J. Phillips, C. K. Chen, R. L. Mills, "Evidence of Catalytic Production of Hot Hydrogen in RF-Generated Hydrogen/Argon Plasmas," J. Appl. Physics, submitted. (<i>Web Publication Date: September 7, 2004.</i>)	
	106	R. L. Mills, "Exact Classical Quantum Mechanical Solution for Atomic Helium which Predicts Conjugate Parameters from a Unique Solution for the First Time," Foundations of Science, submitted. (<i>Web Publication Date: October 28, 2004.</i>)	
	107	R. L. Mills, "Maxwell's Equations and QED: Which is Fact and Which is Fiction," Physica Scripta, submitted. (<i>Web Publication Date: October 28, 2004.</i>)	
	108	R. L. Mills, J. He, M. Nansteel, B. Dhandapani, "Catalysis of Atomic Hydrogen to New Hydrides as a New Power Source," International Journal of Global Energy Issues (IJGEI). Special Edition in Energy System, submitted. (<i>Web Publication Date: April 4, 2005.</i>)	
	109	R. L. Mills, M. Nansteel, J. He, B. Dhandapani, "Low-Voltage EUV and Visible Light Source Due to Catalysis of Atomic Hydrogen," J. Plasma Physics, submitted. (<i>Web Publication Date: April 15, 2005.</i>)	
	110	R. L. Mills, J. He, Z. Chang, W. Good, Y. Lu, B. Dhandapani, "Catalysis of Atomic Hydrogen to Novel Hydrides as a New Power Source," Prepr. Pap.—Am. Chem. Soc., Div. Fuel Chem. 2005, 50(2). (<i>Web Publication Date: April 22, 2005.</i>)	
	111	R. L. Mills, J. He, Z. Chang, W. Good, Y. Lu, B. Dhandapani, "Catalysis of Atomic Hydrogen to Novel Hydrogen Species H ⁺ (1/4) and H ₂ (1/4) as a New Power Source," Thermochimica Acta, submitted. (<i>Web Publication Date: May 6, 2005.</i>)	
	112	R. L. Mills, J. He, Y. Lu, Z. M. Nansteel, Chang, B. Dhandapani, "Comprehensive Identification and Potential Applications of New States of Hydrogen," Central European Journal of Physics, submitted. (<i>Web Publication Date: May 9, 2005.</i>)	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08B (Modified)

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	09/501,622		
		Filing Date	02/09/2000		
		First Named Inventor	Mills		
		Group Art Unit	1745		
		Examiner Name	Kalafut		
Sheet	4	of	12	Attorney Docket Number	8ac4-D2

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		CRITCHLEY <i>et al.</i> , "Energy shifts and forbidden transitions in H ₂ due to electronic g/u symmetry breaking", <i>Molecular Physics</i> , 2003, Vol. 101, Nos. 4-5, pp. 651-661, Taylor & Francis Ltd.	
		GAMBUS <i>et al.</i> , "Spectroscopic Study of Low-Pressure Water Plasmas and Their Reactions with Liquid Hydrocarbons", <i>Energy & Fuels</i> , 2002, 16, pp. 172-176, American Chemical Society	
		CVETANOVIC <i>et al.</i> , "Excessive Balmer line broadening in a plane cathode abnormal glow discharge in hydrogen", <i>Journal of Applied Physics</i> , 97, 033302 (2005), American Institute of Physics	
		AKATSUKA <i>et al.</i> , "Stationary population inversion of hydrogen in an arc-heated magnetically trapped expanding hydrogen-helium plasma jet", <i>Physical Review E</i> , 49, 2, pp. 1534-1544, February, 1994, The American Physical Society	
		MURAKAMI <i>et al.</i> , "Chemisorption of hydrogen into a graphite-potassium intercalation compound C ₈ K studied by means of positron annihilation", <i>J. Chem. Phys.</i> , 62 (10), May 15, 1995, American Institute of Physics	
		AHN, "Hydrogen Storage in Metal-Modified Single-Walled Carbon Nanotubes", Division of Engineering and Applied Science, California Institute of Technology, September 15, 2001	
		DUAN <i>et al.</i> , "Numerical calculation of energies of some excited states in a helium atom", <i>Eur. Phys. J.</i> , D 19, (2002), pp. 9-12, Societa Italiana di Fisica, Springer-Verlag 2002	
		NIXON <i>et al.</i> , "Formation and structure of the potassium graphites", <i>Brit. J. Appl. Phys.</i> , Ser. 2, Vol., 1, pp. 291-299, Great Britain, 2002	
		ZELLINGER, "Experiment and the foundations of quantum physics", <i>Reviews of Modern Physics</i> , Vol 71, No. 2, pp. S288-S297, Centenary 1999, The American Physical Society	

Examiner Signature		Date Considered	
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		COTTON <i>et al.</i> , "Complexes of Cyclic 2-Oxacarbenes. I. A Spontaneous Cyclization to Form a Complex of 2-Oxacyclopentylidene", <i>Journal of the American Chemical Society</i> , 93:11, pp. 2672-2676, June 2, 1971	
		LINDSAY <i>et al.</i> , "A remeasurement of the 2.4 μ m spectrum of $J = H_2$ pairs in a parahydrogen crystal", <i>Journal of Molecular Spectroscopy</i> , 218. Pp. 131-133, 2003	
		JUAREZ <i>et al.</i> , "Photoelectron angular distributions of rotationally resolved states in para-H ₂ ⁺ : A closer to the dynamics of molecular photoionisation", The University of Manchester Atomic, Molecular & Laser Manipulation Group, pp.1-5	
		WEISSTEIN, "Ortho-Para Hydrogen", http://scienceworld.wolfram.com/physics/Ortho-ParaHydrogen.html	
		SMITH, "Infrared spectra of BO ₂ ⁻ in the alkali halides-L. Potassium and rubidium halides", <i>Spectrochimica Acta</i> , Vol. 30A, pp. 875-882, Pergamon Press, 1974	
		LEITCH <i>et al.</i> , "Raman Spectroscopy of Hydrogen Molecules in Crystalline Silicon", <i>Physical Review Letters</i> , 81:2, pp. 421-424, July 13, 1998, The American Physical Society	
		CHEN <i>et al.</i> , "Key to Understanding Interstitial H ₂ in Si", <i>Physical Review Letters</i> , 88:10, pp. 105507-1 - 105507-4, March 11, 2002, The American Physical Society	
		CHEN <i>et al.</i> , "Rotation of Molecular Hydrogen in Si: Unambiguous Identification of Ortho-H ₂ and Para-D ₂ ", <i>Physical Review Letters</i> , 88:24, pp. 245503-1 - 245503-4, June 17, 2002, The American Physical Society	
		LAVROV <i>et al.</i> , "Ortho and Para Interstitial H ₂ in Silicon", <i>Physical Review Letters</i> , 89:21, pp. 215501-1 - 215501-4, November 18, 2002, The American Physical Society	
		STAVOLA <i>et al.</i> , "Interstitial H ₂ in Si: are all problems solved?", <i>Physica B</i> , pp. 58-66, 200s Elsevier B.V.	

Examiner Signature		Date Considered	
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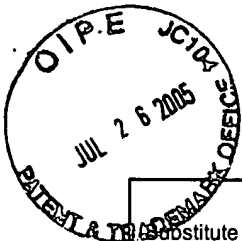
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		MILLS <i>et al.</i> , "Catalysis of Atomic Hydrogen to Novel Hydrides as a New Power Source", pp. 1-8, BlackLight Power, Inc.	
		DECIUS <i>et al.</i> , "Force Constants of the Metaborate Ion in Alkali Halides", <i>The Journal of Chemical Physics</i> , 56:10, pp. 5189-5190, May 15, 1972	
		"Infrared spectra of the metaborate ion in alkali halide solid solution", <i>Research Notes</i> , pp. 600-602	
		SMITH, "Anharmonic force field of the metaborate ion in alkali halides", <i>The Journal of Chemical physics</i> , 58:11, pp. 4776-4778, June 1, 1973	
		HISATSUNE <i>et al.</i> , "Infrared Spectra of Metaborate Monomer and Trimer Ions", <i>Inorganic Chemistry</i> , pp. 168-174	
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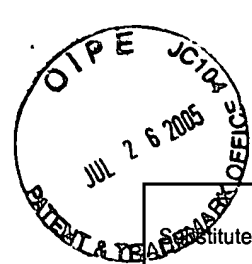
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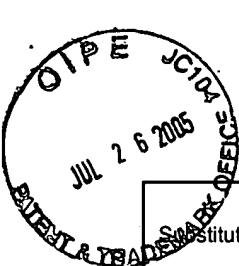
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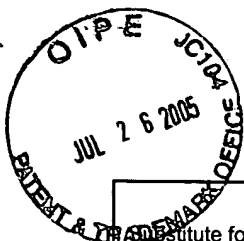
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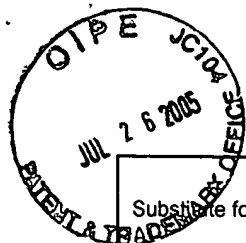
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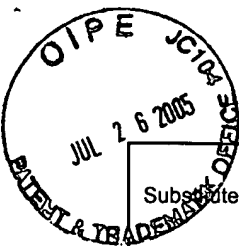
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		Quantum Physics 301, Paradoxes and Interpretation", < http://www.teach..phy.bris..ac.uk/Level30100/CourseMaterials/paradoxes.pdf >	
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